

VALID PUBLICATION OF THE NAMES *TORRENTICOLA* AND
T. QUEENSLANDICA (PODOSTEMACEAE)

by

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ABSTRACT

Aston, Helen I. Valid publication of the names *Torrenticola* and *T. queenslandica* (Podostemaceae). *Muelleria* 7(1): 127–129 (1989). — This article provides the correct citations for the names *Torrenticola* and *T. queenslandica* and discusses the early publications where these names occurred both invalidly and validly.

CITATIONS

There is considerable variation in the literature as to when, where and by whom the generic name *Torrenticola* and the specific name *T. queenslandica* were validly published under the International Code of Botanical Nomenclature (Greuter *et al.* 1988). The correct citations for these names, together with some previously used incorrect citations, are given here and a discussion of them follows.

Torrenticola Domin ex Steenis, Fl. Males. ser. 1, 4: 66 (1949).

Torrenticola Domin, Biblioth. Bot. 89²: 150 (1926) [Jan. 1926, not 1925], *nom. prov.*

Torrenticola Domin ex Steenis, J. Arnold Arbor. 28: 421 (1947), *nom. inval.*

Torrenticola queenslandica (Domin) Domin ex Steenis, Fl. Males. ser. 1, 4: 68 (1949).

Podostemum queenslandicum Domin, Biblioth. Bot. 89²: 149 (1926) [Jan. 1926, not 1925], as *Podostemon*.

Torrenticola queenslandica Domin, op. cit. 150, *nom. prov.*, and 89⁶: tab. 35, figs 7–13 (1928), *nom. inval.*

Torrenticola queenslandica (Domin) Domin ex Steenis, J. Arnold Arbor. 28: 421 (1947), *nom. inval.*

DISCUSSION

Domin (1926) published a new species '*P. ?queenslandicus* n. sp.' under *Podostemum* [as *Podostemon*] Michaux. In his discussion following the species description he suggested that the new species might actually belong to a separate genus and provisionally designated this as '*Torrenticola* n. gen.'. In further discussion he referred to his new species as '*T. queenslandica*'.

Under Articles 34.1 and 34.2 of the International Code of Botanical Nomenclature (Greuter *et al.* 1988) I accept that the specific name *Podostemum queenslandicum* was validly published at this time. Both Domin's wording and the layout of the printed text show that Domin was actually accepting the new species within *Podostemum* although he indicated some taxonomic doubt. The epithet *queenslandicum*, at specific rank, is therefore attributable to Domin and originates from *P. queenslandicum* Domin (1926).

In contrast, the generic name *Torrenticola* and the specific combination *T. queenslandica* were not validly published by Domin in his 1926 paper. *Torrenticola* is not valid according to Article 34.1(b), which states clearly that a name is not validly published when it is merely proposed in anticipation of future acceptance, i.e. when it is a so-called provisional name. The name *T. queenslandica* is not validly published for

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the same reason and also because the generic name *Torrenticola* had not been validated. Article 43.1 indicates that the name of a species is not validly published unless the name of the genus to which it is assigned is, either simultaneously or previously, validly published.

Domin (1928) later published a plate with seven detailed figures of his new species. These figures were captioned '*Torrenticola queenslandica* Dom.'. Apparently Domin was accepting by 1928 that the new species warranted the erection of a new genus and was accepting his former provisional generic name *Torrenticola* as being applicable. Article 42.2 allows for an analytical illustration to replace the written description or diagnosis usually required for valid publication. However, this Article applies only to publications prior to 1 January 1908 and therefore cannot be invoked for validation of the names *Torrenticola* and/or *T. queenslandica* from Domin's 1928 plate. The caption apparently satisfies Articles 41.2(b) and 41.3(b) which allow for the names of genera and species to be validly published by a reference (direct or indirect) to a previously and effectively published description or diagnosis 'of a genus' (for genera) or 'of a species or infraspecific taxon' (for species). The indication of the author's name in the caption '*Torrenticola queenslandica* Dom.' renders the caption acceptable under Article 32.4 as an indirect reference to Domin's 1926 paper (where a specific description and a generic diagnosis appear). However, Articles 41.2(b) and 41.3(b) do not apply in the present instance as Article 42.1 indicates clearly that any reference, whether direct or indirect, to an earlier description or diagnosis is not acceptable in cases of simultaneous validation of a generic and a specific name. For this reason (and for a further provision of Article 42.1; see next paragraph) the names *Torrenticola* and *T. queenslandica* can not be considered simultaneously validly published in Domin's 1928 publication.

Most current publications, including Index Nominum Genericorum (Farr *et al.* 1979), attribute the valid publication of *Torrenticola* and *T. queenslandica* to Van Steenis (1947) in the Journal of the Arnold Arboretum. In that publication Van Steenis cited '*Torrenticola queenslandica* Domin in *Bibl. Bot.* 89²: 149, pl. 35, fig. 7–13. 1925', thereby basing his acceptance of both the generic and specific names on Domin's papers of 1926 [not 1925] and 1928 and automatically accepting the same type as that used by Domin. Van Steenis gave no description or diagnosis, nor did he mention the generic name *Torrenticola* independently of its use within the specific name. Article 42.1 ('The names of a genus and a species may be simultaneously validated by provision of a single description or diagnosis . . .') may have been applied to Van Steenis's publication except that his paper lacks a description or diagnosis and his reference to Domin's prior description is unacceptable because Article 42.1 further states that, in cases of simultaneous validation, ' . . . Reference to an earlier description or diagnosis is not accepted . . .'. The same Article also disallows simultaneous validation of generic and specific names when any prior name (at any rank) has already been validly published based on the same type. In the present case *Podostemum queenslandicum* Domin (1926) constitutes such a prior name. I can find no justification for accepting either *Torrenticola* or *T. queenslandica* as being validly published by Van Steenis in the Journal of the Arnold Arboretum cited.

Engler in Engler and Prantl, *Nat. Pflanzenfam.* edn 2, 18a: 484 (1930), referred to *Torrenticola* and *T. queenslandica* but, following Domin's works which he cited, retained these under *Podostemum* [as *Podostemon*]. The names therefore remain invalid in Engler's work.

Van Steenis (1949) included *Torrenticola* and *T. queenslandica* in his account of Podostemaceae in *Flora Malesiana* and this must surely be accepted as the place and date of valid publication of both names. Here *Torrenticola* is clearly accepted in both the key and the text as the name of a distinct genus and Domin's two papers are cited under *Torrenticola* thus: 'Domin, *nom. prov. Bibl. Bot.* 89, 2 (vol. 20) (1925) 149, t. 35, f. 7–13'. The citation of p. 149 can be treated merely as a bibliographic error of citation, p. 150 being the actual page on which Domin proposed the provisional name *Torrenticola* n. gen. and gave his Latin diagnosis of it. Van Steenis (1949) therefore satisfies the requirements of Article 36.1 for a reference to a previously and effectively

published Latin description or diagnosis. As he attributed the generic name to Domin the complete citation of it is *Torrenticola* Domin ex Steenis; this may be shortened to *Torrenticola* Steenis (Article 46.3).

Van Steenis (1949) cited '*Torrenticola queenslandica* Domin, l.c.' under the genus *Torrenticola*. As we have seen, Domin had only mentioned this combination provisionally but had validly published *Podostemum queenslandicum* Domin on p. 149 of his 1926 paper cited by Van Steenis. Van Steenis (1949) therefore validated a new combination *Torrenticola queenslandica* (Domin) Steenis (1949) based on *Podostemum queenslandicum* Domin (1926) (Article 49.1). As Domin also had provisionally suggested the name *T. queenslandica* the complete but optional citation for it (Article 46.3) is *T. queenslandica* (Domin) Domin ex Steenis (1949).

REFERENCES

- Farr, E. R. *et al.* (eds) (1979). Index nominum genericorum (plantarum). Vol. 3, *Pegaeophyton-Zyzygium*. *Regnum Veg.* vol. 102.
Greuter, W. *et al.* (eds) (1988). International code of botanical nomenclature. *Regnum Veg.* vol. 118.

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